

ABSTRACT OF THE DISCLOSURE

A method for the production of a locally limited diffusion layer on a metal component is disclosed. In an embodiment, the method includes the steps of application of a paste containing Cr, Si and/or Al, and containing activators, to the areas of the metal component to be coated. The paste is solidified to form a donor pack. The regions which are not to be coated and are adjacent to the donor pack are covered with a diffusion-blocking powder pack. The component is heated to a temperature above 900°C in order to carry out the alitiation, siliconization and/or chromation. The method can be used in the production of turbine rotors.